

II. Remarks

Claims 1-9 were pending in this application and have been rejected. The present amendment cancels claims 3 and 4, adds new claims 10 and 11, and amends claims 1-2, 5-7 and 9 to more particularly point out and clarify Applicants' invention. No new matter has been added. After this amendment, claims 1-2 and 5-11 will be pending.

Reconsideration of the application in view of the above amendments and following remarks is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

Claims 1-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 1,388,488 to Senn ("Senn") in view of U.S. Patent No. 5,850,741 issued to Feher ("Feher"). Claims 3 and 4 have been cancelled by the present amendment and therefore, the rejections of claims 3 and 4 are now moot. In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claims 1-2 and 5-9 are traversed.

Claim 1 has been amended to recite that the rim comprises two heat pipes and two wicks where each of the two heat pipes contains one of the two wicks. Each of the two heat pipes extend around approximately half of the circumferentially extent of the rim from the upper-most region to a lower-most region of the rim. The two heat pipes each having a first end and a second end that is disposed opposite the first end. The first ends of the heat pipes arranged adjacent each other, and the second ends of the heat pipes arranged adjacent each other. Support for these

amendments may be found in Applicants' application at paragraph [0027] and Figure 5.

Senn discloses a steering wheel with a rim that is heated so as to assist the driver in keeping his hands warm. The rim is formed from a single hollow tube *c* that is bent into a circular shape. The opposing ends of the tube *c* are connected by a member *d*, which is provided with a neck and an opening. The opening is closed with a plug *g*, which carries an electric heating element *h*. A small portion of heating liquid *i* is placed within the hollow tube *c* of the rim where the member *d* provides fluid communication between the two ends of the tube *c* so that the amount of liquid *i* is sufficient to well fill the connecting member *d*. The heating element *h* extends into the liquid *i*, thereby vaporizing the liquid *i* as steam to fill the remainder of the hollow tube *c* to heat the entire periphery of the steering wheel. *Senn* at lines 30-107. Notably, however, Senn's steering wheel only contains a single tube *c*, and the ends of the single tube are open to allow the connecting member *d* to be well filled with the liquid *i*, which is unlike Applicants' claimed invention where the rim comprises two heat pipes with the ends of each of the heat pipes arranged adjacent the ends of the other heat pipe.

Feher discloses an apparatus 10 for modifying the temperature extremes at the hand grip regions 16 and 18 of a vehicle steering wheel 12. The apparatus 10 has a heat pump 20 including a thermoelectric device 30 that is mounted on the center, rear side of the steering wheel 12 adjacent the steering column. A single U-shaped heat pipe 36 has two arms defining first and second heat pipe sections 22 and 24. The heat pipe sections 22 and 24 are secured to thermoelectric device 30

and extend outwardly from the center of the steering wheel 12 toward the hand grips 16 and 18 and have end portions that terminate within the hand grips 16 and 18. “The heat pipe 36 is generally dimensioned and of such a geometry that its outer two pipe sections 22 and 24 are bent downwardly at the circumferential portion of the steering wheel 12”. In the heating mode, fluid inside the heat pipe 36 vaporizes first and then condenses on the inside walls of the heat pipe 36 to warm the hand grip heat exchangers 26 and 28 (adjacent the hand grips 16 and 18). The inside of the heat pipe 36 is covered with a wicking material to transport condensed fluid back to the heat pump 20. *Feher* at Col. 2, line 30 – Col. 3, line 55, and Figures 2-6. Notably, however, *Feher*’ steering wheel has only a single heat pipe 36, and further, the end portions of the heat pipe sections are substantially spaced apart from each other on opposite sides of the steering wheel and are not adjacent to each other, which is unlike Applicants’ claimed invention where the rim comprises two heat pipes with the ends of each of the heat pipes arranged adjacent the ends of the other heat pipe.

Neither Senn nor *Feher* independently or in combination, disclose, teach or suggest the present invention recited in claim 1. In particular, neither Senn nor *Feher* independently or in combination, disclose, teach or suggest a rim comprising two heat pipes and two wicks where each of the two heat pipes contains one of the two wicks, each of the two heat pipes extending around approximately half of the circumferentially extent of the rim from the upper-most region to a lower-most region of the rim, and the two heat pipes each having a first end and a second end that is disposed opposite the first end, the first ends of the heat pipes arranged adjacent

each other, and the second ends of the heat pipes arranged adjacent each other. In that both Senn and Feher lack the noted elements of claim 1, the rejections based thereon should be withdrawn.

Moreover, neither Senn nor Feher independently or in combination, disclose, teach or suggest the further limitations recited in claim 6 of the two heat pipes are thermally connected to one another via at least one of the first ends and the second ends.

Accordingly, Applicants believe that claim 1 and its dependent claims 2 and 5-9 are in a condition for allowance.

Claims 10 and 11 have been added by the present amendment are believed to be allowable not only because they depend from claim 1 but for their own specific elements recited therein.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is requested.

Respectfully submitted,

Dated: March 1, 2010

/Daniel P. Dailey/
Daniel P. Dailey, Reg. No. 54,054
Attorney for Applicant(s)

BRINKS HOFER GILSON & LIONE
524 SOUTH MAIN STREET
SUITE 200
ANN ARBOR, MI 48104
(734) 302-6000